AMENDMENTS

Please amend the claims as follows:

1. (Currently amended) A method of differentiating progenitor cells to produce a cell population containing neuronal cells protected from apoptotic cell death, comprising the steps of:

(a) contacting said progenitor cells with a differentiating agent; and

(b) introducing into said progenitor cells a nucleic acid molecule encoding a MEF2 polypeptide or an active fragment thereof,

thereby differentiating said progenitor cells to produce a cell population containing ~~protected~~ neuronal cells protected from apoptotic cell death.

2. (Original) The method of claim 1, wherein said MEF2 polypeptide is human MEF2C, or an active fragment thereof.

3. (Original) The method of claim 1, wherein said MEF2 polypeptide is constitutively active.

4. (Original) The method of claim 3, wherein said constitutively active MEF2 polypeptide is a MEF2/VP16 fusion protein.

5. (Original) The method of claim 3, wherein said constitutively active MEF2 polypeptide contains one or more serine/threonine to aspartic acid/glutamic acid substitutions in the MEF2 transactivation domain.

6. (Original) The method of claim 1 or claim 3, further comprising inhibiting caspase activity in said progenitor cells.

7. (Original) The method of claim 1, wherein said progenitor cells are human stem cells.

8. (Original) The method of claim 1, wherein said progenitor cells are embryonic stem cells.

9. (Original) The method of claim 8, wherein said embryonic stem cells are human embryonic stem cells.

10. (Original) The method of claim 1, wherein said progenitor cells are hematopoietic progenitor cells.

11. (Original) The method of claim 10, wherein said hematopoietic progenitor cells are human hematopoietic progenitor cells.

12. (Original) The method of claim 1, further comprising selecting CD133-positive human progenitor cells.

13. (Original) The method of claim 1, further comprising selecting CD133-positive/CD34-positive human progenitor cells.

14. (Original) The method of claim 1, further comprising selecting CD133-positive/CD34-negative human progenitor cells.

15. (Original) The method of claim 1, further comprising selecting CD133-positive/CD34-negative/CD45-negative human progenitor cells.

16. (Original) The method of claim 1, further comprising selecting CD34-negative/CD38-negative/Lin-negative human progenitor cells.

17. (Original) The method of claim 1, further comprising selecting CD34-positive/CD38-negative/Lin-negative/ Thy-1-negative human progenitor cells.

18. (Original) The method of claim 1, wherein said differentiating agent is retinoic acid.

19. (Original) The method of claim 1, wherein said differentiating agent is selected from the group consisting of neurotrophic factor 3, epidermal growth factor, insulin-like growth factor 1 and a platelet-derived growth factor.

20. (Original) The method of claim 1, wherein said population containing protected neuronal cells comprises at least 50% neuronal cells.

Claims 21-57 (Canceled)

58. (Previously Presented) The method of claim 1, wherein said nucleic acid molecule is stably introduced into said progenitor cells.

59. (Currently amended) A method of differentiating progenitor cells to produce a cell population containing neuronal cells protected from apoptotic cell death *in vitro*, comprising the steps of:

(a) contacting *in vitro* said progenitor cells with a differentiating agent; and

(b) introducing into said progenitor cells a nucleic acid molecule encoding a MEF2 polypeptide or an active fragment thereof,

thereby differentiating said progenitor cells to produce a cell population containing ~~protected~~ neuronal cells protected from apoptotic cell death.

60. (Previously presented) The method of claim 59, wherein said MEF2 polypeptide is human MEF2C, or an active fragment thereof.

61. (Previously presented) The method of claim 59, wherein said MEF2 polypeptide is constitutively active.

62. (Previously presented) The method of claim 61, wherein said constitutively active MEF2 polypeptide is a MEF2/VP16 fusion protein.

63. (Previously presented) The method of claim 61, wherein said constitutively active MEF2 polypeptide contains one or more serine/threonine to aspartic acid/glutamic acid substitutions in the MEF2 transactivation domain.

64. (Previously presented) The method of claim 59 or claim 61, further comprising inhibiting caspase activity in said progenitor cells.

65. (Previously presented) The method of claim 59, wherein said progenitor cells are human stem cells.

66. (Previously presented) The method of claim 59, wherein said progenitor cells are embryonic stem cells.

67. (Previously presented) The method of claim 66, wherein said embryonic stem cells are human embryonic stem cells.

68. (Previously presented) The method of claim 59, wherein said progenitor cells are hematopoietic progenitor cells.

69. (Previously presented) The method of claim 68, wherein said hematopoietic progenitor cells are human hematopoietic progenitor cells.

70. (Previously presented) The method of claim 59, further comprising selecting CD133-positive human progenitor cells.

71. (Previously presented) The method of claim 59, further comprising selecting CD133-positive/CD34-positive human progenitor cells.

72. (Previously presented) The method of claim 59, further comprising selecting CD133-positive/CD34-negative human progenitor cells.

73. (Previously presented) The method of claim 59, further comprising selecting CD133-positive/CD34-negative/CD45-negative human progenitor cells.

74. (Previously presented) The method of claim 59, further comprising selecting CD34-negative/CD38-negative/Lin-negative human progenitor cells.

75. (Previously presented) The method of claim 59, further comprising selecting CD34-positive/CD38-negative/Lin-negative/ Thy-1-negative human progenitor cells.

76. (Previously presented) The method of claim 59, wherein said differentiating agent is retinoic acid.

77. (Previously presented) The method of claim 59, wherein said differentiating agent is selected from the group consisting of neurotrophic factor 3, epidermal growth factor, insulin-like growth factor 1 and a platelet-derived growth factor.

78. (Previously presented) The method of claim 59, wherein said population containing protected neuronal cells comprises at least 50% neuronal cells.

79. (Previously presented) The method of claim 59, wherein said nucleic acid molecule is stably introduced into said progenitor cells.